The Ethical Issues

by **Arthur R. Jensen**

The range of ethical issues concerning research and research applications in human genetics is so great that I will not even attempt to review it here. It involves diverse questions about raising human embryos in "test tubes," the use of artificial insemination in human research, the cross-fostering of fetuses, and direct alteration of chromosomes and genes by what is now called genetic surgery, and goes all the way to questions of eugenics and population quantity and quality control.

But the most frequently heard objection to further research into human genetics, particularly research into the genetics of behavioral characteristics, is that the knowledge gained might be misused. I agree. Knowledge also, however, makes possible greater freedom of choice. It is a necessary condition for human freedom in the fullest sense. I therefore completely reject the idea that we should cease to discover, to invent, and to know (in the scientific meaning of that term) merely because what we find could be misunderstood, misused, or put to evil and inhumane ends. This can be done with almost any invention, discovery, or addition to knowledge. Would anyone argue that the first caveman who discovered how to make a fire with flint stones should have been prevented from making fire, or from letting others know of his discovery, on the grounds that it could be misused by arsonists? Of course not. Instead, we make a law against arson and punish those who are caught violating the law. The real ethical issue, I believe, is not concerned with whether we should or should not strive for a greater scientific understanding of our universe and of ourselves. For a scientist, it seems to me, this is axiomatic.

An important distinction, often not made or else overlooked, is that between scientific research and the specific use of the research findings in a technological application with a highly predictable outcome. The classic example is the atomic bomb. Should Einstein have desisted from the research that led to $e = mc^2$? Nuclear physics can, of course, be misused. But it need not be. For it can also be used to cure cancer and to provide electric power. Moral decisions involve the uses of knowledge and must be dealt with when these are considered. Before that, however, my own system of values holds that increasing knowledge and understanding is preferable to upholding dogma and ignorance.

In a society that allows freedom of speech and of the press, both to express and to criticize diverse views, it seems to me the social responsibility of the scientist is clear. He must simply do his research as competently and carefully as he can, and report his methods, results, and conclusions as fully and as accurately as possible. When speaking as a scientist, he should not introduce personal, social, religious, or political ideologies. In the bizarre racist theories of the Nazis and in the disastrous Lysenkoism of the Soviet Union under Stalin, we have seen clear examples of what happens when science is corrupted by servitude to political dogma.

For the past two years, I have been embroiled in debate over my article "How Much Can We Boost I.Q. and Scholastic Achievement?" (*Harvard Educational Review*, 39, 1969, pp. 1–123). Though there are many possible grounds for raising ethical questions concerning research and publication on the genetic aspect of human abilities, in this case I think a block has been raised because of obvious implications for the understanding of racial differences in ability and achievement. Serious consideration of whether genetic as well as environmental factors are involved has been taboo in academic, scientific, and intellectual circles in the United States. But despite taboo, the question persists. My belief is that scientists in the appropriate disciplines must finally face this question squarely and not repeatedly sweep it under the rug. In the long run, the safest and sanest thing we can urge is intensive, no-holds-barred inquiry in the best tradition of science.

We must clearly distinguish between research on racial differences and racism. Racism implies hate or aversion and aims at denying equal rights and opportunities to persons because of their racial origin. It should be attacked by enacting and enforcing laws and arrangements that help to insure equality of civil and political rights and to guard against racial discrimination in educational and occupational opportunities. But to fear research on genetic racial differences, or the possible existence of a biological basis for differences in abilities, is, in a sense, to grant the racist's assumption: that if it should be established beyond reasonable doubt that there are biological or genetically conditioned differences in mental abilities among individuals or groups, then we are justified in oppressing or exploiting those who are most limited in genetic endowment. This is, of course, a complete non sequitur. Equality of human rights does not depend upon the proposition that there are no genetically conditioned individual differences or group differences. Equality of rights is a moral axiom: It does not follow from any set of scientific data.

I have always advocated dealing with persons as individuals, and I am opposed to according differential treatment to persons on the basis of their race, color, national origin, or social-class background. But I am also opposed to ignoring or refusing to investigate the causes of the well-established differences among racial groups in the distribution of educationally relevant traits, particularly I.Q. Purely environmental explanations of racial differences in intelligence will never gain the status of scientific knowledge unless genetic theories are put to the test and disproved by evidence.

There is a perhaps understandable reluctance to come to grips scientifically with the problem of race differences in intelligence—to come to grips with it, that is to say, in the same way that scientists would approach the investigation of any other phenomenon. This reluctance is manifested in a variety of "symptoms" found in most writings and discussions of the psychology of race differences. These symptoms include a tendency to remain on the remotest fringes of the subject, to

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sidestep central questions, and to blur the issues and tolerate a degree of vagueness in definitions, concepts, and inferences that would be unseemly in any other realm of scientific discourse. Many writers express an unwarranted degree of skepticism about reasonably well-established quantitative methods and measurements. They deny or belittle facts already generally accepted—accepted, that is, when brought to bear on inferences outside the realm of race differences—and they demand practically impossible criteria of certainty before even seriously proposing or investigating genetic hypotheses, as contrasted with extremely uncritical attitudes toward purely environmental hypotheses. There is often a failure to distinguish clearly between scientifically answerable aspects of the question and the moral, political, and social-policy issues; there is a tendency to beat dead horses and to set up straw men on what is represented, or misrepresented, I should say, as the genetic side of the argument. We see appeals to the notion that the topic is either too unimportant to be worthy of scientific curiosity, or is too complex, or too difficult, or that it will be forever impossible for any kind of research to be feasible, or that answers to key questions are fundamentally "unknowable" in any scientifically acceptable sense. Finally, we often see the complete denial of intelligence and race as realities, or as quantifiable attributes, or as variables capable of being related to one another. In short, there is an altogether ostrich-like dismissal of the subject.

I believe these obstructive tendencies will be increasingly overcome the more widely and openly the subject is researched and discussed among scientists and scholars. As some of the taboos against open discussion of the topic fall away, the issues will become clarified on a rational basis. We will come to know better just what we do and do not yet know about the subject, and we will be in a better position to deal with it objectively and constructively through further research.

In recent years, however, we have witnessed more and more the domination of ideologically motivated environmentalist dogma concerning the causes of large and socially important differences in average educational and occupational performance among various subpopulations in the United States, particularly those socially identified as racial groups. For example, the rate of occurrence of mental retardation, with I.Q.'s below 70 plus all the social, educational, and occupational handicap that this implies, is six to eight times higher in our Negro population than in the rest of the population. According to research sponsored by the National Institutes of Health, as many as 20 to 30 per cent of the black children in some of our largest urban centers suffer severe psychological handicaps. Yet the Government *has* not supported, *does* not, and *will* not, as of this date, support any research proposals that could determine whether or not any genetic factors are involved in this differential rate of mental handicap. To ignore such a question, in terms of our present knowledge, I submit, may not be unethical—but it is, I believe, short-sighted, socially irresponsible, and inhumane.

More important than the issue of racial differences per se is the probability of dysgenic trends in our urban slums. The social-class differential in birthrate appears to be much greater in the Negro than in the white population. That is, the educationally and occupationally least able among Negroes have a higher reproductive rate than their white counterparts, and the most able segment, the middle class, of the Negro population have a lower reproductive rate than their white counterparts. If social-class intelligence differences within the Negro population have a genetic component, as in the white population, this condition could both create and widen genetic intelligence differences between Negroes and whites. The social and educational implications of this trend, if it exists and persists, are enormous. The problem obviously deserves thorough investigation by social scientists and geneticists and should not be ignored or superficially dismissed because of well-meaning wishful thinking. I find myself in agreement with Professor Dwight Ingle, who has said, "If there are important average differences in genetic potential for intelligence between Negroes and non-Negroes, it may be that one necessary means for Negroes to achieve true equality is biological." The possible consequences of our failure to seriously study these questions may well be viewed by future generations as our society's greatest injustice to Negro Americans.

Carl Jay Bajema, a Harvard geneticist and researcher on population trends who is frequently cited by my critics in support of their notion that there are no dysgenic trends to worry about (based on his earlier, limited research), now has this to say (in *Bio-Science*, 29, 1971, pp. 71–5):

> The overall net effect of current American life-styles in reproduction appears to be slightly dysgenic—to be favoring an increase in harmful genes which will genetically handicap a larger proportion of the next generation of Americans. American life-styles in reproduction are, in part, a function of the population policy of the United States. What will be the long-range genetic implications of controlling or not controlling population size in an industrialized welfare state democracy such as America? . . . [He concludes:] . . . Each generation of mankind faces anew the awesome responsibility of making decisions which will affect the quantity and genetic quality of the next generation. A society, if it takes its responsibility to future generations seriously, will take steps to insure that individuals yet unborn will have the best genetic and cultural heritage possible to enable them to meet the challenges of the environment and to take advantage of the opportunities for self-fulfillment present in that society.

Finally, some persons who call themselves environmentalists tend to cast the issues of genetic research on intelligence and race as a battle between the good guys and the bad guys. I resent this. The simple-minded morality play in which I have been wittingly or unwittingly cast in the role of villain has presented the issue of ethics as if ethical behavior were the sole possession of the environmental dogmatists, and as if those of us who would suggest looking into genetic factors were ethical and moral pariahs! One rather prominent social psychologist publicly made libelous and defamatory statements about my article in the *Harvard Educational Review*, and for nearly two years, repeated attempts have failed to elicit either a substantiation or a retraction of the charges.

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"Knowledge can be misused, but this does not excuse efforts to block inquiry and debate or to deny laymen in a democratic society the right to know. Closed systems of belief can also be misused, and ignorance is a barrier to progress. All possible causes for people's being disadvantaged should be investigated, and hopefully the application of knowledge to their advancement will be guided by moral principle" (Professor Dwight Ingle in *Perspectives in Biology and Medicine*, 10, 1967). In my view, society will benefit most if scientists treat these problems in the spirit of scientific inquiry rather than as a battlefield upon which one or another preordained ideology may seemingly triumph. ■